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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,260	01/21/2004	Kia Silverbrook	WAL16US	1041
24011 7590 03/26/2010 SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA			EXAMINER NGUYEN, LAM S	
			ART UNIT 2853	PAPER NUMBER
			NOTIFICATION DATE 03/26/2010	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/760,260	<b>Applicant(s)</b> SILVERBROOK ET AL.	
	<b>Examiner</b> LAM S. NGUYEN	<b>Art Unit</b> 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) 2-4,6-11,14-16,19,20,32-36,43 and 46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5,12,13,17,18,21-31,37-42,44,45 and 47-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 17, 31, 37-38, 41-42, 44-45, 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (US 2002/0171692 A1) in view of Nozawa (US 5701147), Miller et al. (US 6068370), and Petterson (US 4712814).

#### **Regarding to claims 1, 31, 37-38, 41-42, 44-45, 47-49:**

Martin discloses a printer for producing rolls of wallpaper, comprising:

a housing (*FIG. 2, element 18*) in which is located a media path which extends from a blank media intake to a wallpaper exit slot (*FIG. 2, elements 24 and 26*);

a multi-color removable printhead (*FIG. 2, element 20*) located in the housing, the printhead being supplied by separate ink reservoirs (*FIG. 2, element 22*) via an ink supply harness;

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one or more input devices (*FIG. 2, element 30, 32*) for capturing operator instructions;

a processor which accepts operator inputs which are used to configure the printer for producing a particular roll (*FIG. 2, element 38*).

- Martin however is silent wherein the printhead is roll width located across the media path.

Nozawa discloses a printing apparatus comprising a printhead (*FIG. 9, element 204*) for forming images across a moving printing medium (*FIG. 9, element 203*), wherein the printheads having a width about the same as one of the printing medium (full width) and located across the moving path of printing medium.

Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to modify Martin's printhead to be full-width printhead as disclosed by Nozawa. The motivation for doing so would have been to be able to print the entire width of the printing medium without scanning the printhead to gain printing speed as taught by Nozawa (*column 1, lines 30-39; column 3, lines 57-62*).

- Martin also does not teach wherein the ink supply harness comprising a plurality of printhead hoses removably attached to the printhead and a

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corresponding plurality of ink supply hoses attached to the respective reservoirs, a coupling which disconnectedly couples the printhead hoses to the reservoirs hoses.

Miller et al. discloses an inkjet printer comprising ink reservoirs and printheads, wherein the printhead (*FIG. 4*) being supplied by separate ink reservoirs (*FIG. 4, elements 31-34*), the reservoirs connected to the printhead by an ink supply harness comprising a plurality of printhead hoses (*FIG. 5, elements 36B-C, 66*) removably attached to the printhead and a corresponding plurality of reservoir hoses attached to the respective reservoirs, a coupling which disconnectedly couples the printhead hoses to the reservoirs hoses (*FIGs. 5 and 11, element 60*).

Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to modify Martin's printing apparatus to provide an ink coupler for coupling the reservoir hoses and the printhead hoses as disclosed by Miller et al. The motivation for doing so would have been to be able to route the ink fluid through ninety degree turns in large diameter tubes as taught by Miller et al. (*column 4, lines 1-6*).

- Martin, as modified in view of Miller et al., is silent wherein the coupler is a self-sealing disconnect coupling having two parts which disconnectedly couple the hoses.

Petterson teaches a coupler for coupling pipes in a liquid system, wherein the coupler, having two parts (*FIGs. 5-6, elements 1 and 10*) which disconnectedly couple to the pipes (*column 2, lines 43-48*), is self-sealing when the coupling is in a disengaged state in order to prevent leakage (*column 1, lines 43-55*).

Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to modify Martin's printing apparatus, as modified in view of Miller, by replacing Miller's coupler by Petterson's self-sealing coupler having two parts to prevent the liquid leakage when the parts of the coupler are disengaged as taught by Petterson (*column 1, lines 43-55*).

- **Martin also discloses the following claimed invention:**

**Regarding to claim 17:** wherein the path comprises a generally straight path which is self threading (*FIG. 2*).

**Regarding to claims 31, 37, 41:** the winding area adapted to removably retain a core and wind on it, wallpaper produced by the printer (*FIG. 2, element 24, 26*), and the length and design of the roll are determined by the operator inputs (*paragraph [0010]*).

**Regarding to claim 42:** running the printer according to the data; printing a single roll of wallpaper, on demand, according to a selected pattern and configuration (*paragraphs [0009]-[0010]*), and changing the pattern according to a

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new datum from an operator and then printing a new roll onto the same web

*(paragraph [0010]: A user loads a blank roll of wallpaper in the printer and inputs one or more personal images that is/are printed on the blank roll. It means that for each customer or order a blank roll is loaded and printed with a new pattern (design/image). In addition, at certain point of time, when the length of the current roll is not enough for a new order, then a new roll is loaded to the same web for printing images with the new order).*

**Regarding to claim 48:** a motor within the cabinet for advancing the media web out of the media cartridge and one or more motors adapted to urge the media along the path and out of the slot (*FIG. 2: The corresponding motor or motors drive(s) the supply roll, the take-up roll, or the drive roller*).

**Regarding to claims 38, 39, 40, 42, 44, and 49:** The claims even though depend on claim 1, which is an apparatus claim, but cite a method of using the apparatus. The claims thus do not contribute to the physical structure of the apparatus. As a result, the claims are considered but not given patentable weight.

2. Claims 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (US 2002/0171692 A1) in view of Nozawa (US 5701147), Miller et al. (US 6068370), and Petterson (US 4712814) as applied to claim 1, and further in view of Goldstein (US 2002/0069078 A1).

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Martin, as modified, discloses the claimed invention as discussed above but is silent about charging a customer for the roll or obtaining/attempting to obtain a fee from a franchisee.

Goldstein discloses a system for creating custom wallpaper including a program to charge and obtain fee from customers ordered printed wallpaper rolls (*FIG. 2, steps 208, 210, 212, 214*).

Therefore, it would have been obvious for one having ordinary skill in the art at the time invention was made to modify Martin's apparatus, as modified, to include means for charging and obtaining fee from a customer as disclosed by Goldstein et al. The motivation for doing so would have been to allow an operator/customer to purchase created custom wallpaper as taught by Goldstein (*paragraphs [0043]-[0046]*).

**3.** Claims 21-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (US 2002/0171692 A1) in view of Nozawa (US 5701147), Miller et al. (US 6068370), and Petterson (US 4712814) as applied to claim 1, and further in view of Silverbrook (US 2002/0158924 A1).

Martin, as modified, discloses the claimed invention as discussed above except wherein the blank media is printed by the printhead at a rate exceeding 0.2 square meters per second (7750 square feet per hour), wherein the printhead has



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more than 250,000 nozzles, and wherein the printhead prints ink drops with a volume of less than 1.5 picoliters.

Silverbrook discloses an ink jet printing apparatus comprising an ink jet printhead for ejecting ink drops on a printing medium to form images, wherein the printhead has more than 250,000 nozzles (*paragraph [0099]*), ejects ink drops with a volume of less than 1.5 picoliters (*paragraph [0101]*), and prints the media at a rate exceeding 0.2 square meters per second (7750 square feed per hour) (*paragraph [0102]*).

Therefore, it would have been obvious for one having ordinary skill in the art at the time invention was made to modify the printhead in Martin's printing apparatus, as modified, to have a large number of nozzles and eject small volume ink drops as disclosed by Silverbrook. The motivation for doing so would have been to allow the printhead to print at high rate such as 21.6 billion drops/second to provide thirty-five thousand square feet per hour as taught by (*paragraph [0102]*).

**4.** Claims 12-13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (US 2002/0171692 A1) in view of Nozawa (US 5701147), Miller et al. (US 6068370), and Petterson (US 4712814) as applied to claim 1, and further in view of Rasmussen et al. (US 6536894).

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Martin, as modified, discloses the claimed invention as discussed above except wherein the path further comprises a flat platen pre-heater located before the printhead in the path and below a moving web, and further comprising an air supply and a tube for bringing a supply of air to the printhead which supply prevents media from contacting the printhead.

Rasmussen et al. discloses a printing system including a printhead (*FIG. 2A, element 14*) for forming images on a printing medium moving on a media path, a flat platen pre-heater (*FIG. 2A, element 201*) located before the printhead and below a moving web (*FIG. 2A, element 32*), and an air supply and a tube for bringing a supply of air to the printhead which supply prevents media from contacting the printhead (*FIGs. 1, 2A; element 37*).

Therefore, it would have been obvious for one having ordinary skill in the art at the time invention was made to modify Marin's printing apparatus, as modified, to include a pre-heater located before the printhead as disclosed by Rasmussen et al. The motivation for doing so would have been to provide mechanism for drying and flattening a sheet prior to ink jet printing to reduce inherent moisture in order to improve ink jet print quality as taught by Rasmussen et al. (*Abstract*).

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**5.** Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (US 2002/0171692 A1) in view of Nozawa (US 5701147), Miller et al. (US 6068370), and Petterson (US 4712814) as applied to claim 1, and further in view of Austin et al. (US 5488223).

Martin, as modified, discloses the claimed invention as discussed above except a bar code scanner which communicates with the processor and through which data is input.

Austin et al. discloses a printing system including a bar code scanner (*Abstract; FIG. 2A, element 114*) communicating with a processor (*FIG. 2A, element 120*), wherein the bar code scanner is used for input data (data entry) (*Abstract*).

Therefore, it would have been obvious for one having ordinary skill in the art at the time invention was made to modify Martin's printing apparatus to include a bar code scanner as disclosed by Austin et al. The motivation for doing so would have been to allow operators to input/entry desired data as taught by Austin et al. (*Abstract*).

### ***Response to Arguments***

Applicant's arguments filed 12/29/2009 have been fully considered but they are not persuasive.

In response to the Applicant's arguments, the Examiner notices that it is possible to replace Miller's coupler (60) by Petterson's self-sealing coupler to obtain the benefit that preventing liquid from leakage when the parts of the coupler are in disengaged state while the system is in a maintenance mode.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAM S. NGUYEN whose telephone number is (571)272-2151. The examiner can normally be reached on 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, STEPHEN D. MEIER can be reached on (571)272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LAM S NGUYEN/  
Primary Examiner, Art Unit 2853

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